

Forward Plan reference number: FP/274/01/22

Report title: Army and Navy Sustainable Transport Package: Preferred Option for the junction improvement.	
Report to: Cabinet	
Report author: Councillor Lesley Wagland, Cabinet Member for Economic Renewal, Infrastructure and Planning	
Date: 15 March 2022	For: Decision
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County Divisions affected: All Chelmsford Divisions	

1. Everyone's Essex

- 1.1 The Army and Navy junction in Chelmsford is a key gateway into and out of the city and was being used by up to 70,000 vehicles a day and 72 buses an hour prior to the COVID-19 pandemic. The junction consists of a five-arm roundabout, which until 2019 had a tidal flyover that carried one-way traffic (cars only) to and from the A1060/A1114 over the roundabout. The junction is already over capacity during the morning and evening peak times. As a result, it suffers from severe congestion and bus passengers, pedestrians, cyclists and drivers regularly experience delays. This also results in it being a poor-quality environment for all road users. The situation is expected to get worse in the future unless we do something differently.
- 1.2 We cannot continue to build additional capacity for vehicles by building more new roads. Instead, we need to provide better options for people to travel, especially for shorter journeys where we want walking or cycling to be the natural choice. The Army and Navy Sustainable Transport Package is an opportunity to develop a long-term and sustainable solution for Chelmsford with the re-design of the Army and Navy junction alongside the provision of sustainable and active travel infrastructure to encourage people to travel around the city in safer, greener, and healthier ways, improving journeys for everyone.
- 1.3 Identifying a preferred option for the junction will enable us to progress the development of an Outline Business Case for the Department for Transport (DfT) to bid for Major Road Network (MRN) funding.
- 1.4 The Army and Navy Sustainable Transport Package would deliver benefits in line with the Environment: Transport and Built Environment commitments set out within Everyone's Essex; to deliver a step change in sustainable travel across the county and encouraging active and sustainable travel to reduce pollution and congestion. This will be achieved with the investment in walking, cycling and bus priority facilities such as replacing the current subway and creating accessible walking and cycling connections at ground-level at the

junction, providing new bus lanes on Parkway and providing new cycle routes in the vicinity of the junction. It also aligns with the aims in Everyone's Essex of a strong and sustainable economy because it involves delivery of high-quality infrastructure to improve opportunities for people living in Essex.

2 Recommendations

- 2.1 Agree that the Hamburger Roundabout option is taken forward as the preferred option for the junction improvements.
- 2.2 Agree that the Director, Highways and Transportation, in consultation with the S151 Officer, should develop an Outline Business Case for this option and submit it to the Cabinet Member to approve for submission to the Department for Transport (DfT) for funding from Major Road Network (MRN) fund.

3 Background and Proposal

- 3.1 The Army and Navy junction is a critical part of the Chelmsford transport network and a vital gateway into and out of the city. It was being used by up to 70,000 vehicles a day and 72 buses an hour prior to the COVID-19 pandemic. The junction consists of a five-arm roundabout, which until 2019 had a tidal flyover that carried one-way traffic (cars only) to and from the A1060/A1114 over the roundabout. In normal times the junction is already over capacity during the morning and evening peak times. As a result, it suffers from severe congestion and bus passengers, pedestrians, cyclists and drivers regularly experience delays. This also results in it being a poor-quality environment for all road users. The situation is expected to get worse in the future unless we do something differently.
- 3.2 We cannot continue to build additional capacity for vehicles by building more new roads. Instead, we need to provide better options for people to travel, especially for shorter journeys where we want walking or cycling to be the natural choice. The Army and Navy Sustainable Transport Package is an opportunity to develop a long-term and sustainable solution for Chelmsford with the re-design of the Army and Navy junction alongside the provision of sustainable and active travel infrastructure to encourage people to travel around the city in safer, greener, and healthier ways, improving journeys for everyone.
- 3.3 A dedicated Army and Navy Taskforce, made up of elected members of Essex County Council, Chelmsford City Council and Great Baddow Parish Council and the local MP, has been supporting in driving forward the project and lobbying the Government for funding.
- 3.4 The Chelmsford Future Transport Network Strategy sets out a vision for Chelmsford to have a transport system which is best in class, offering enhanced connectivity, access and choice to residents, commuters, visitors and businesses. It also sets the approach to the city's transport network to give people real choice in the way they travel, helping keep the city moving, improve

people's health and wellbeing, protect the environment, and support economic growth. It focuses on the type of journey – short, medium, and long distance – and, through a zonal approach, prioritises specific modes of transport in different areas of Chelmsford, with an increasing focus on sustainable travel towards the city centre. The Army and Navy junction is on the border of the central and mid zones, meaning any scheme must include sustainable travel measures such as walking, cycling and buses.



Figure 1: Chelmsford Future Transport Strategy

- 3.5 The Department for Transport (DfT) has also stressed the need for any scheme bidding for Major Road Network (MRN) funding to include sustainable transport improvements and this will be vital in successfully securing funding for the project.
- 3.6 The stated vision for the project is: To provide a sustainable solution which maximises the level of people throughput into and out of the City and which provides a gateway to the City befitting of the 21st Century.
- 3.7 The objectives of the project are to:
- Offer inclusive, attractive, and safe active travel measures (walking and cycling) across an improved and comprehensive network to encourage increased use for all
 - Positively manage resilience and journey time reliability, improving journey times for passenger transport services travelling into/ out of the City Centre Core

- Provide enhanced connectivity for communities within and beyond Chelmsford to support and promote sustainable housing and economic growth and regeneration both now and in the future
 - Increase the attractiveness of the gateway into the City Centre through design and public realm enhancements
 - Improve safety and the perception of safety for all users on the Chelmsford City network to enhance and promote a safe travelling environment
 - Manage environmental conditions (Air Quality and Noise)
 - Actively manage resilience and journey time reliability for private transport trips within the core urban area of Chelmsford and in particular management of through trips.
- 3.8 After a thorough assessment of a number of potential junction layouts and sustainable transport improvements (which is detailed in section 5 below), an eight-week public consultation was held in Summer 2021 between 9 August and 3 October 2021 to consult on the following proposals:
- Two junction options –
 - a Hamburger Roundabout (a roundabout with a road through the centre of it) and
 - Separate T-junctions – two new T-junctions would be created –one linking Essex Yeomanry Way and Chelmer Road, and the other linking Essex Yeomanry Way/Parkway and Van Diemens Road/Baddow Road. Traffic signals would be used to control traffic flow at the junctions.
 - A 350-space expansion of Sandon Park and Ride.
 - A new Park and Ride site in Widford (two site options are being considered).
 - Wider connectivity improvements across the walking and cycling networks
- 3.9 This decision relates specifically to the preferred option at the junction and the recommendation that the Hamburger option is taken forward as the preferred option for the junction improvements. This is in response to the public consultation where there was significant support for this option and is consistent with the technical work which illustrates its significant benefits.
- 3.10 The need to identify a Preferred Option for the junction improvement is to enable us to progress the development of the Outline Business Case for the Department for Transport (DfT) to bid for Major Road Network (MRN) funding. The Outline Business Case should be based on one option. The submission of the Outline Business Case is anticipated for Autumn 2022.
- 3.11 The Army and Navy Sustainable Transport Package would deliver benefits in line with the Environment: Transport and Built Environment commitments set out within Everyone's Essex; to deliver a step change in sustainable travel across the county and encouraging active and sustainable travel to reduce pollution and congestion.

4 Links to our Strategic Ambitions

4.1 This report links to the following aims in the Essex Vision

- Develop our County sustainably
- Connect us to each other and the world

4.2 Approving the recommendations in this report will have the following impact on the Council's ambition to be net carbon neutral by 2030: Although the proposed scheme could increase greenhouse gases by 0.03 million tonnes (MtCO₂e) over 60 years, it will provide significantly improved walking and cycling facilities and further prioritise public transport. These measures, combined with the ability to better manage traffic flows at the junction in the future, will support the Council's net carbon neutral ambitions.

4.3 This report links to the following strategic priorities in the emerging Organisational Strategy 'Everyone's Essex':

To deliver a step change in sustainable travel across the county and encouraging active and sustainable travel to reduce pollution and congestion.

5 Options

5.1 Extensive work has been carried out to help identify the right long-term solution for Chelmsford for this project. Significant work was undertaken to reduce a number of ideas to five initial options, which were shared with the public in November 2019. These were:

- Minor Road Layout Improvements
- Two-way Flyover
- Hamburger Roundabout – a roundabout crossed by a road as shown in figure 4 below
- Enlarged Roundabout and
- Separate T-Junctions – two new T-junctions would be created –one linking Essex Yeomanry Way and Chelmer Road, and the other linking Essex Yeomanry Way/Parkway and Van Diemens Road/Baddow Road. Traffic signals would be used to control traffic flow at the junctions.

5.2 The initial options were upgraded to include improved walking and cycling facilities at the junction and were evaluated to look at the effects on congestion, journey times, the economy and use of sustainable modes of transport, as well as environmental and construction impacts. During the various stages of the assessment process, lower performing options have been ruled out.

5.3 In April 2020 the **Minor Road Layout Improvements** option was ruled out because it would not go far enough in reducing congestion and delays at the junction or in helping to create additional capacity for pedestrians, cyclists and buses.

- 5.4 In January 2021 the **Two-Way Flyover** option was ruled out because it would increase city centre traffic and congestion the most, have the most damaging visual impact on the landscape and would not support the Park and Ride or walking and cycling aspirations of the Chelmsford Future Transport Network Strategy as well when compared with the other options.
- 5.5 In July 2021, the **Enlarged Roundabout** was ruled out because it would not meet the project objectives as well as the other two options. When accompanied by enhanced walking and cycling facilities at the junction, it would not sufficiently improve the junction for motorised vehicles and would be unlikely to secure funding.
- 5.6 The two remaining junction options - **Hamburger Roundabout** and **Separate T-Junctions** were taken forward to public consultation (August - October 2021).
- 5.7 Due to uncertainty about restrictions caused by the ongoing COVID-19 situation, it was decided that the consultation would have a strong digital focus, complemented by some more traditional approaches to help ensure it was as accessible as possible. The exhibition contained a series of information boards outlining the background to the project and details of our current options and proposals, as you would expect to find at a traditional consultation event. The virtual exhibition had a total 5,847 visitors during the consultation period.
- 5.8 In total, 850 responses to the consultation were received, including 842 survey responses, with the majority (76%) of those from residents of Chelmsford. Among the key findings were:
- More than half of participants agreed that the proposed package would have a positive impact on Chelmsford (18% strongly agree and 37% agree) while a further 24% described their views on this as neutral.
 - 60% of respondents indicated they preferred the hamburger roundabout option, compared with 21% who preferred the separate T-junctions option; 18% were undecided/no preference.
 - 20% of respondents said the hamburger roundabout option, together with the wider measures proposed, would encourage them to travel through the junction using a different mode of transport in the future – compared with 16% for the Separate T-junctions option.
 - Almost half of respondents agreed the ‘proposed walking and cycling improvements would create a more coherent network for pedestrians and cyclists in Chelmsford’ (12% strongly agree and 35% agree), while a further 32% described their views on the statement as neutral.
 - Most respondents (67%) had no preference about their preferred site for a proposed new Park and Ride in Widford, with slightly more respondents preferring the Greenbury Way site (18%) over the London Road site (13%).
 - The majority of respondents (60%) supported the idea of expanding Sandon Park and Ride before work got underway at the Army and Navy junction to help manage disruption and improve travel options during construction.

- 99 respondents commented that they would prefer a new flyover to either option. This option was not the subject of consultation for the reasons set out in paragraph 5.4 and these comments do not change our view that a new flyover should not be progressed.

5.9 In terms of notable qualitative feedback

- There was a good level of support for the proposed junction options and the impact they would be likely to have, however there were also a number of respondents who felt a flyover would be a better option for the junction. Concerns were also raised about certain elements of the junction options, notably the potential for confusion, the increase in the number of traffic signals, perceived worsening of congestion and traffic flow and the negative impact of proposals to remove existing permit parking bays in Van Diemens Road.
- Some respondents felt the proposed walking and cycling measures did not go far enough and there was mixed feedback about proposals to remove the existing subway and replace it with ground-level crossings.
- There was good support for the proposed expansion of Sandon Park and Ride and a proposed new Park and Ride site in Widford, although some questioned the demand for these measures, particularly in light of the impacts of the COVID-19 on passenger numbers. A number of concerns were raised about the safety of pupils regularly walking to a school playing field neighbouring the London Road site and needing to cross the road at the proposed entrance to the site.

5.10 The consultation provided a valuable insight into the public's views about the proposed Army and Navy Sustainable Transport Package. The feedback received plays an important role in informing the decisions made on the project including supporting the identification of a preferred junction option, as well as helping inform detailed design and highlighting points to be considered. However it is one factor of various other factors which form part of the decision-making process such as benefits and costs, environmental considerations, construction and objectives (see Figure 2 below).



Figure 2: Decision Making Process

5.11 The benefits of the Hamburger Roundabout and Separate T-Junctions are outlined below, focusing on the Safer, Greener Healthier elements:

- **Walking and cycling** – Both options would enable quicker and safer journeys for cyclists, reducing average peak period journey times through the junction by 35% (Hamburger Roundabout) and 22% (Separate T-Junctions). Improved pedestrian facilities would provide a safer and more attractive walk through the junction, with all crossings at ground level rather than in a subway. Walking through the junction at ground level would be about 11% quicker (Hamburger Roundabout) and 4% quicker (Separate T-Junctions) on average, while average walking times would be similar (Hamburger Roundabout) and slightly slower (Separate T-Junctions) to those where the subway is currently used.
- **Health and wellbeing** – More people walking and cycling would result in health benefits, such as reduced illness and increased life expectancy, valued at £19 million*¹ (for both the Hamburger Roundabout and Separate T-Junctions)
- **Park and Ride** – Would result in a 28 - 32%* increase (Hamburger Roundabout) and 38 - 45%* increase (Separate T-Junctions) in total Park and Ride passenger numbers by 2041
- **Bus improvements** – New bus priority measures would reduce peak period bus journey times through the junction by about 24% on average (Hamburger Roundabout) and average peak period bus journey times through the junction would be marginally quicker (0.2%) with the Separate T-Junctions.

5.12 Detailed evaluation of the junction options, using predicted future travel levels to assess the likely impacts of the option across a range of categories, has been undertaken. The results of which are:

- **Economic Growth:** Positive impact on the economy, resulting in an estimated £62m - £73m* increase (Hamburger Roundabout) and £12m - £27m* increase (Separate T-Junction) in GDP (Gross Domestic Product) over 60 years
- **Travel Time:** Large travel time and journey time reliability improvements, with benefits valued at about £245m - £284m* (Hamburger Roundabout) and £86m - £144m* (Separate T-Junction)
- **Traffic:** Reduced congestion at the Army and Navy junction, with an average reduction in travel time through the junction at peak times for motorised vehicles of about 49% (Hamburger Roundabout) and about 7% (Separate T-Junction) in the opening year (2026).

For the Separate T-Junction no U-turns would be possible at the junction. No direct turns from Baddow Road to Essex Yeomanry Way or Chelmer Road and Van Diemens Road to Baddow Road. The movements would instead be made by performing a U-turn at the Odeon roundabout.

¹ * All monetary values are net present value (2020 prices). Any range in values reflects which Widford Park and Ride site is chosen (Greenbury Way or London Road respectively)

- **Objectives:** Both schemes meet the project objectives well and are also in line with wider Government objectives, such as improving access and productivity. However, the Hamburger Roundabout scores more highly across the objectives than the Separate T-Junction.
- **Costs:** The overall cost of the Army and Navy Sustainable Transport Package varies by just 2%, depending on which junction layout option is chosen, however the Hamburger Roundabout is estimated to cost less than the Separate T-Junction.

5.13 Other impacts

5.13.1 Air Quality: The Air Quality Management Area (AQMA) between the Army and Navy junction and the Odeon Roundabout is not expected to be an AQMA by the opening year of the scheme (2026). For both the Hamburger Roundabout and the Separate T-Junctions no exceedances of annual mean nitrogen dioxide (NO₂) Air Quality Objectives (threshold levels set to protect human health) are predicted at sensitive receptors (areas where the occupants are more susceptible to adverse effects of exposure to air pollutants) within the current Air Quality Management Area with the scheme in place.

5.13.2 Carbon Emissions: Increase in greenhouse gases of 0.03 million tonnes (MtCO₂e) over 60 years (0.003% of total surface transport emissions in the wider Essex area) for the Hamburger Roundabout and 0.05 million tonnes (MtCO₂e) over 60 years (0.005% of total surface transport emissions in the wider Essex area) for the Separate T-Junction, although this could potentially be lower in the future with parking strategy changes, vehicles switching to more efficient fuels or changing travel behaviours. These increases are relatively low for schemes of this type and ECC will have the opportunity, with a fully signalised junction in place, to far better control and prioritise traffic flows through the junction. The vastly improved pedestrian and cycling facilities at the junction, in association with the improved bus priority measures will encourage active travel and support the Council's net carbon neutral ambitions.

5.13.3 Construction: Construction is estimated to take approximately 18 - 22 months for the Hamburger Roundabout and approximately 22 - 26 months for the Separate T-Junctions. The economic impact of the traffic delay caused by the construction of the option is valued at about £7.3 million (2010 prices) for the Hamburger Roundabout and about £5.3 million (2010 prices) for the Separate T-Junctions. The economic impact of the Separate T-Junctions is lower than the Hamburger Roundabout option because more of the construction is away from existing roads.

5.13.4 Noise: Change in noise levels would be likely to be experienced throughout our study area, although the change in levels would generally be minor or negligible (+ or – 2.9dBA). Some homes would be likely to experience a minor noise increase due to increased traffic flows/speeds, primarily those along Princes Road and Van Diemens Road for the Hamburger Roundabout option and those along Essex Yeomanry Way in Meadgate and parts of Great Baddow and Moulsham for the Separate T-Junctions option. Other properties would be likely to experience a minor noise decrease, including those along Longfield Road, Gloucester Avenue and Maldon Road in Great Baddow, and within the Old Moulsham Estate for the Hamburger Roundabout option and

those along Baddow Road, Longfield Road, Gloucester Avenue and Maldon Road in Great Baddow, and within Moulsham for the Separate T-Junctions option. Noise mitigation measures, such as noise barriers, could reduce these adverse impacts, where possible.

- 5.13.5 **Landscape:** The Hamburger Roundabout option would largely be within the footprint of the existing roundabout, and it is likely that some of the existing trees would be lost within the roundabout. The reconfiguration of the Separate T-Junctions would move traffic away from residential properties at the northern end of Baddow Road and listed buildings (Hamlet Terrace and Moulsham Mill). Both options would have a localised impact on the Chelmer and Blackwater Navigation Conservation Area West, including loss of vegetation along Essex Yeomanry Way, however there are opportunities for replanting in this area. With the Separate T-Junctions option there would also be the opportunity to improve pedestrian circulation and could include extending the green space next to the Chelmer and Blackwater Navigation Conservation Area West to soften views of the road from the conservation area and listed buildings at Moulsham Mill.
- 5.13.6 **Historic Environment:** For both options, no impact on historic landscape is expected. The proposals could have an effect on the setting of individual Grade II listed buildings and on non-designated heritage assets, however, further assessment would be required.
- 5.13.7 **Flooding:** Certain elements of the options, such as the new left-turn slip road from Chelmer Road to Essex Yeomanry Way for the Hamburger Roundabout option and the realignment of Chelmer Road for the Separate T-Junctions, would be within an area of floodplain and would be likely to have an adverse impact of flood risk. However, with both options, mitigation measures would be included within the design to avoid or minimise the impact. Further assessment is required.
- 5.13.8 **Biodiversity:** Both options could result in adverse impacts on local habitats, including Chelmsford Water Meadows Local Wildlife Site and protected species. There would also be a loss of trees (approximately 80 for the Hamburger Roundabout and approximately 60-70 for the Separate T-Junctions). Mitigation measures would minimise any adverse impacts and ecological enhancement opportunities would be explored. There will be a biodiversity 'net gain' target, with habitat compensation either on or off the site of the scheme.
- 5.13.9 **Safety:** Both options would provide a safer junction than the existing one for private vehicles, although total accidents would increase by 1.2-1.9%* for the Hamburger Roundabout and by 0.9-1.8%* for the Separate T-Junctions simply because of the additional traffic currently predicted to travel through the junction (using the DfT's growth forecasts) and the creation of a new access junction for a proposed Widford Park and Ride site. The package of sustainable transport measures included within the Army & Navy scheme will provide ECC with the tools needed to be able to further encourage active travel, which should help to control traffic growth at the junction.

- 5.14 In summary, when assessed against the DfT's key business case criteria (as set out in Figure 3, below), the Hamburger Roundabout option performs better than the Separate T-Junction option because it:

- Fits better with project specific and wider Government objectives

- Would have a much greater positive impact on the economy
- Represents far better Value for Money
- Would have a more positive impact on Well Being
- Would be quicker to build, with fewer risks
- Has greater public acceptability

5.15 The preferred option for the junction improvement is therefore the Hamburger Roundabout option illustrated diagrammatically below (Figure 4).



Figure 4: Hamburger Roundabout option (visualisation)

6 Issues for consideration

6.1 Financial implications

6.1.1 The estimated overall cost of the Army & Navy Sustainable Transport Package is expected to be £67.660m including an allowance for risk of £14.17m and the implications of a Compulsory Purchase Order of land, should it be required, for the junction improvements. The table below sets out the anticipated expenditure and funding profiles and no increase to the borrowing requirement of ECC is required as a result of this investment decision. However some uncertainty remains over the external funding streams as set out below and this position may change over time.

	Historic spend £000	2021/22 Forecast £000	2022/23 £000	2023/24 £000	2024/25 £000	2025/26 £000	2026/27 £000	2027/28 £000	Total £000
Expenditure	2,420	1,355	2,541	1,951	10,955	20,764	17,393	10,281	67,660
ECC	2,420	1,355	1,160	139	1,074	-	-	-	6,149
CIL (CCC)	-	-	-	1,812	2,188	-	-	-	4,000
DfT (MRN)	-	-	1,381	-	7,692	20,764	17,393	10,281	57,511
Total	2,420	1,355	2,541	1,951	10,955	20,764	17,393	10,281	67,660

6.1.2 The project is expected to be funded as follows, subject to confirmation and agreement with DfT and CCC:

- (a) £57.511m from the Department for Transport via the Major Roads Network (MRN) programme. This is an increased ask of the MRN funding and will be subject to approval following the submission of the OBC. The DfT have recently issued a letter dated 18 January 2022 that sets out it is not able to fund all schemes currently in their programme to the full scale and timing. This scheme meets the requirement of the MRN funding and has recently received confirmation of a successful SOBC on 1 February 2022. However should the full funding not be agreed, ECC will be required to either reduce the scope of the project to match the available budget envelope or to seek alternative funding.
- (b) £10.149m via the 15% minimum required local contribution to be split between Essex County Council capital funding at £6.149m and Community Infrastructure Levy (CIL) contributions at £4m held by Chelmsford City Council.

6.1.3 Major Roads Network (MRN) Funding: Officers are currently working on securing the MRN funding for delivery. The project has been successful at the Pre-Strategic Outline Business Case in 2019 and the Strategic Outline Business Case in early 2022, with approval to progress to the next stage – submission of an Outline Business Case (OBC). Officers are currently working with the DfT on the progression of the OBC and envisage submission of this in Autumn 2022, where approval in principle would be obtained (subject to Final Business Case (FBC) approval). It is worthy of note that the DfT have awarded ECC £1.381m towards the cost of developing the OBC.

6.1.4 Community Infrastructure Levy (CIL) Monies: In October 2018 Chelmsford City Council (CCC) approved the identification of the Army and Navy junction as a key strategic infrastructure priority for the allocation of CIL monies. CCC have sent written confirmation to contribute £4m to the project.

6.1.5 ECC Capital Commitment: Up to a maximum £8.150m of ECC capital funding has already been allocated to this project, to date £3.304m of costs have been incurred. This funding has been allocated for: all stages of design for A&N Sustainable Transport Package elements; public consultation; communications; planning applications; land purchase; development of business cases for DfT; tender documentation.

6.1.6 The DfT changed the MRN funding criteria to allow for awards of more than the initial cap of £50m, providing the 15% local authority contribution is made.

Should ECC be awarded the full allocation from both DfT and CCC there may be scope to reduce the ECC contribution from £8.150m to £6.149m.

- 6.1.7 The expansion of the existing park and ride sites is not expected to result in a significant increase to the revenue costs of its operation. The usage of the sites will be carefully monitored, with additional buses and staffing to be instated when sufficient demand is created. There will likely be a small increase to the site maintenance. The progression of the park and ride proposals will come forward internally with sensitivity analysis modelled.

Financial Risks:

- 6.1.8 ECC will be responsible for any cost escalation that emerges and may be required to descope or find alternative external funding to contain this.
- 6.1.9 Both MRN and CCC funding are yet to be confirmed, therefore ECC continues to spend at risk on this project. If this scheme were not to progress
- 6.1.10 The expenditure forecast has allowed for £5.315m for inflation related to CPO impacts (on top of the £14.17 risk allowance), but with no specific allowance for CPO. If a CPO is not required, the spend profile included above will change.

6.2 Legal implications

- 6.2.1 The construction of any junction will need careful consideration of many legal issues including:
- 6.2.1 It is understood that the hamburger roundabout cannot be constructed without acquiring land. Should we be unable to acquire the land by agreement then the council will need to use compulsory purchase which could delay the programme and involve expensive legal advice and compensation.
 - 6.2.2 What level of environmental assessment is required
 - 6.2.3 The risk of claims from the owners of property nearby
 - 6.2.4 Planning permission
 - 6.2.5 Relocating equipment belonging to statutory undertakers
 - 6.2.6 Procurement of a contract for the construction
 - 6.2.7 Ensuring that the design minimises the risk of liability for accidents
- 6.2.2 These issues cannot be resolved until more detailed work is undertaken but they will be an important consideration in assessing how long the scheme will take to deliver and how much it will cost.

7 Equality and Diversity Considerations

- 7.1 The Public Sector Equality Duty applies to the Council when it makes decisions. The duty requires us to have regard to the need to:
- (a) Eliminate unlawful discrimination, harassment and victimisation and other behaviour prohibited by the Act. In summary, the Act makes discrimination etc. on the grounds of a protected characteristic unlawful

- (b) Advance equality of opportunity between people who share a protected characteristic and those who do not.
- (c) Foster good relations between people who share a protected characteristic and those who do not including tackling prejudice and promoting understanding.

7.2 The protected characteristics are age, disability, gender reassignment, pregnancy and maternity, marriage and civil partnership, race, religion or belief, gender, and sexual orientation. The Act states that 'marriage and civil partnership' is not a relevant protected characteristic for (b) or (c) although it is relevant for (a).

7.3 The equality impact assessment indicates that the proposals in this report will not have a disproportionately adverse impact on any people with a particular characteristic.

- Although the recent public consultation had a strong digital focus this was complemented by some more traditional approaches to help ensure it was as accessible as possible, including an audio version via Chelmsford Talking Newspaper.
- The design of the scheme has to be compliant to design standards and LTN1/20 guidance so all users of the network are considered.
- Improvements for sustainable transport measures (bus, walking and cycling) will offer a positive impact to all ages accessing education, employment, health, retail and leisure. However this would specifically positively impact the younger and older generation.
- Improvements for sustainable transport measures (bus, walking and cycling) will offer a positive impact to those with a physical impairment. The improvements to the walking and cycling options, which would be LTN1/20 compliant, would help facilitate journeys. Or, if using the bus services, the improvements here would also offer benefits.
- For those who are either elderly or have a physical disability who are unable to walk, cycle or use the bus, the car can continue to be used and the package provides improvements to vehicles travelling through the junction too.

8 List of Appendices

8.1 Equality impact assessment

8.2 Consultation Report

9 List of Background papers

9.1 Army and Navy Sustainable Transport Package Public Consultation Brochure